

PACKAGING ARCHITECTURE FOR A MULTIPLE ARRAY
TRANSCEIVER USING A CONTINUOUS FLEXIBLE CIRCUIT

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ABSTRACT OF THE DISCLOSURE

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The packaging architecture for a multiple array transceiver using a continuous flexible circuit of the present invention provides a 90-degree transition between an optical signal input at a communications chassis bulkhead and an interior board within the communications chassis. In one form, the multiple array transceiver comprises a forward vertical carrier having an optical converter, such as a laser or a photodetector, a rearward horizontal block oriented about 90 degrees from the forward vertical carrier, and a flexible circuit having a plurality of electrical layers between the forward vertical carrier and the rearward horizontal block. The flexible circuit can have a power layer, a ground layer, and a signal layer. The multiple array transceiver can further provide a heat sink, a ground land and a power land on the vertical carrier face, and a lens housing assembly aligning an optical lens array with the optical converter.

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